

The Canada-U.S. Gulf of Maine Program: Bureaucrats without Borders

Larry Hildebrand

Environment Canada-Atlantic Region, Dartmouth, Nova Scotia

Abstract

The Gulf of Maine is a semi-enclosed marine ecosystem that is encompassed by the northern New England states and two Canadian Maritime provinces. In 1989, the Governors of Maine, New Hampshire and Massachusetts and the Premiers of Nova Scotia and New Brunswick, recognized the need to work collaboratively and across provincial, state, international, terrestrial and maritime borders, to manage this shared resource on an ecosystem basis. The Gulf of Maine Council on the Marine Environment was thus established to facilitate the sharing of information, establish a common vision and set of goals and objectives, and to develop and implement a common action plan that would maintain and enhance environmental quality and to allow for sustainable resource use by existing and future generations.

For the past 13 years, state, provincial and federal agencies from the region have been working creatively and collaboratively on issues of common interest and concern to this shared ecosystem. This international program is somewhat unique in that it was established, and is led by the provincial and state governments; the federal governments are invited partners who participate and provide support, but do not dictate the agenda nor lead the process of collaboration. The Gulf of Maine program offers important lessons for cooperative ecosystem management.

Physical and Socio-economic Overview

On the east coast of North America, in the coastal region flanked by the northern New England states and the Canadian Maritime provinces, lies the Gulf of Maine. Broadly defined and considered to include the watershed, coastal regions and marine waters of the Bay of Fundy, Gulf of Maine proper, and Georges and Browns Bank, this important ecosystem is united in its biology, oceanography and economy, but partitioned jurisdictionally by the Canada-U.S. international border and the boundaries of two Canadian provinces and three U.S. states. This corner of the ocean is often referred to as a semi-enclosed system, or a 'sea within a sea', because its waters are almost entirely cut off from the North-western Atlantic Ocean by the submerged plateaus of underwater banks and are isolated by temperature and salinity differences from the rest of the Atlantic. The Bay of Fundy is known for its extreme tidal range—the highest in the world—which can be up to 50 feet/15 metres (VanDuesen and Johnson-Hayden 1989).

Widely regarded as one of the world's most biologically productive bodies of water (Wells and Ralston 1991), the Gulf has nourished a thriving maritime heritage for several centuries. The Gulf of Maine region supports hundreds of species of fish and shellfish and more than 18 species of marine mammals at some time during the year (including the northern right whale, the most endangered of all the marine mammals found in the region). Many species of fish, marine mammals and birds lead transboundary lives in the Gulf of Maine. Until they were restricted in the 1970s, foreign fishing fleets came from around the world to harvest the abundant supply of fish from Gulf waters. The result has been a significantly diminished resource. Beyond the fisheries sector, there are other uses that threaten the quality and sustainability of the Gulf of Maine ecosystem. The shipping of petroleum products continues to be an important use of the Gulf and cases of oil discharges and spills that harm wildlife, as well as ship-whale collisions are commonly reported. Recent population and economic growth has dramatically changed the types and intensities of land use in parts of the Gulf region. More than 5 million people currently reside in the coastal counties of the Gulf of Maine region.

The growth of human population and concomitant development in the Gulf region have resulted in a series of stresses that impinge upon the regional environment. Although limited data exist to fully assess the trends in environmental quality in the Gulf of Maine, and this ecosystem appears to remain healthy overall (Harding 1992), the warning signs of degradation throughout the Gulf are clear in the research results of the last two decades. Tons of raw and partially treated sewage are discharged into the Gulf each day, resulting in several hundred thousands of acres of productive shellfish habitat being closed to harvesting and resulting in serious loss of livelihood. Industrial discharges, urban runoff, and agricultural practices all introduce toxic contaminants and bacteria to marine and estuarine waters on a chronic, sometimes acute basis, with the result that certain fish and shellfish exhibit liver lesions, fin rot and other signs of environmental stress. Health advisories have been issued in several nearshore regions of the Gulf to protect the public from the hazards associated with swimming in polluted waters and eating contaminated seafood. Increased fishing effort has reduced fish stocks to all time lows and populations of some commercially valuable fish species now depend upon an

increasingly limited number of year classes, and some may not be reproducing themselves at all. Coastal habitat has been altered and destroyed by land development ever since European settlement several centuries ago and development in the coastal zone continues to encroach on environmentally significant marine wetlands. The right whale, piping plover and other species of wildlife are endangered or declining, and accidental spills of oil and other toxic material place additional stresses upon the Gulf environment (Thurston 1994).

Governance Framework in the Gulf of Maine

There are many agencies of government at the federal, state and provincial levels in the Gulf of Maine region, which have programs and activities that support the goals of environmental protection and conservation. It is largely through the efforts of these agencies, that improvements in environmental quality in the Gulf of Maine have been realized. However, it is also understood that the collective result of these individual jurisdictional efforts is not enough to ensure the long-term sustainability of the entire Gulf of Maine region. The evidence in the Gulf's declining water quality, degraded resources and increasing use conflicts, suggested very clearly, that a broader, more cooperative and Gulf-wide effort among researchers, policy makers and resource managers, that reaches across political boundaries, was needed.

Cooperation between the United States and Canada in the Gulf of Maine has not always been the case. When Canada and the U.S. extended their jurisdiction for fisheries management in 1977, both nations claimed the highly productive Georges Bank. Attempts to negotiate a fisheries agreement allowing mutual access to Georges Bank failed. In October 1984, the International Court of Justice decided on a boundary line that divided jurisdiction over Georges Bank between the two countries.

Despite the traditional jurisdictional approaches to pollution control and habitat protection in the Gulf of Maine region, and the highly legalized conflict over Georges Bank, the two countries are engaged in an increasing number of initiatives and institutions that are cooperative and transboundary. By way of example, the two countries have signed and are implementing a reciprocal fisheries enforcement treaty, have been conducting cooperative oil spill preparedness and response exercises in the Gulf every two years since 1974, and a Regional Association for Research on the Gulf of Maine (RARGOM) is an association of U.S. and Canadian institutions that advocates and facilitates a coherent program of long-range, interdisciplinary regional research.

The Gulf of Maine Program

Recognizing that the Gulf of Maine is a common resource of inestimable value to the residents of this binational area, and the fact that there was no existing governance framework that looked at the region as one ecosystem, or addressed all issues in a comprehensive fashion, in 1989, the Governors of the U.S. states of Maine, New Hampshire and Massachusetts and the Premiers of the Canadian provinces of Nova Scotia and New Brunswick, signed the *Gulf of Maine Agreement on the Marine Environment*. Through this agreement, the five jurisdictions agreed to work cooperatively for the conservation and protection of this shared ecosystem.

The *Gulf of Maine Council on the Marine Environment* was formed to administer this partnership agreement. Its membership comprises the Ministers of the Nova Scotia and New Brunswick departments of Environment and Labour or Local Government as well as Fisheries, Aquaculture and Agriculture, and two senior U.S. state administrators (depending on the State) of Environmental Affairs/Services, Coastal Zone Management, Marine Resources or State Planning in each of the three U.S. jurisdictions. Two years into the program, a prominent private sector member from each jurisdiction was added to the Council.

The Gulf of Maine Council has four primary roles in its focus on the health of the Gulf of Maine: Convene partners; marshal resources and decide how best they should be used to further the Council's mission; support projects, when possible, as part of a region-wide focus; and educate the public and raise awareness of the value of the Gulf of Maine.

This international agreement is significant in at least two regards. First, it was signed just five years after the two countries had to resort to the World Court to resolve a maritime boundary dispute in the region. It is also unique in that the agreement is between the provinces and states; the Canadian and U.S. federal governments are not signatory. While the federal governments are not signatory to this agreement, they are, in practice, full participants at the Council table and throughout the program. Known formally as *Federal Partners* on the Council, six federal departments (Environment Canada, Fisheries & Oceans Canada, and the U.S. National Oceanic and Atmospheric Administration, Fish & Wildlife Service, Environmental Protection Agency, and Army Corps of Engineers) are full members on the Council's Working Group and committees. Federal partners make financial contributions to the Council and/or support its activities through substantial in-kind and program support. The Council is supported by a *Working Group* of state/provincial/federal

planners and resource managers, and five committees: Data & Information Management; Environmental Quality Monitoring; Habitat; Aquaculture; and Public Education and Participation. Operations of the Council are assisted by a secretariat, which rotates among the five jurisdictions on an annual basis.

In 1991, the Council issued a 10-year Action Plan, which outlined the key areas of focus for the Council and the areas of cooperative program activity that they would work cooperatively to support. These included: monitoring and research; coastal and marine pollution; habitat protection; education and participation; and protection of public health. Notable efforts in the first five years of the program include, *inter alia*: establishment of a Gulf-wide marine monitoring program (contaminants in blue mussels); a regional data and information management system; an inventory of point sources of pollutants; agreement on the regionally significant plant and animal species; and substantial public education and outreach initiatives (e.g., newsletters, fact sheets, public conferences) (Gulf of Maine Council 1996).

Through the Council's self-evaluation efforts (survey of 300 organizations and individuals in the region and a synthesis of recommendations from more than thirty scientific and professional workshops) and based on the results of a public stakeholder conference in 1994, a revised five-year Action Plan (1996-2001) was released by the Council in December 1996. The Action Plan included: A reaffirmation of support for the program by the Governors and Premiers. They pledged: *That our state and provincial agencies with coastal and marine habitat responsibilities will address the Action Plan priorities through their annual work plans/ budgets; they will work cooperatively with the region's non-governmental organizations, businesses, and individuals on implementing the Action Plan; and they will periodically report on their progress to the Gulf of Maine Council so that the region's residents can be kept informed of progress being made.* The Council's Mission Statement is: *To maintain and enhance environmental quality in the Gulf of Maine and to allow for sustainable resource use by existing and future generations;* and five key goals under its unifying theme of Coastal and Marine Habitat: Protect and restore regionally significant coastal habitat; Restore shellfish habitats; Protect human health and ecosystem integrity from toxic contaminants in marine habitats; Reduce marine debris; and Protect and restore fishery habitats and resources.

As in the first five years, the 1996-2001 Action Plan maintained a focus on transboundary objectives, rather than addressing individual state, provincial, federal or local community issues. The site-specific strategies and actions detailed in the Action Plan are either pilot, demonstration, or education projects, yielding experiences and information that can be transferred to other jurisdictions around the Gulf.

As stated in the Gulf of Maine's Action Plan (1996-2001), "*the Council's highest priority during the next five years is on coastal habitats.*" A broad consensus has emerged on the need to do more to protect wetlands and other vulnerable habitats in the Gulf. The program also moved into additional areas of focus, not previously addressed, such as the long-range transport of atmospheric contaminants into the region, Marine Protected Areas and the control of non-point sources of land-based pollution. The issue of land-based activities that affect the quality and sustainability of the marine environment is being addressed through an evolving partnership between the Gulf of Maine Council and a multi-stakeholder Coalition (Global Programme of Action Coalition), which has been supported by the Commission for Environmental Cooperation, (which operates under the authority of the North American Agreement on Environmental Cooperation). The sensitive issue of fisheries management in the Gulf, which had been largely 'off the table' during the early years of the program, was eased into through the Action Plan's priority on "*increasing awareness about the Gulf's finfish resources and habitats.*" The Gulf of Maine Council recently released its new five-year action plan (2001-2006) that will build on areas of common focus and accomplishments realized to date.

Successes, Challenges and Opportunities

The Gulf of Maine regime is not legally binding. Rather than affecting compliance through regulation, it provides mechanisms for building consensus and coordination to harmonize domestic environmental law, policy and management. The purpose of this is to develop inter-jurisdictional cooperative mechanisms for the resolution of environmental problems. Human resources are based in the state-provincial and federal departments and agencies and the Council must rely on the goodwill and commitment of these partners to fulfil its objectives (Chircop et al. 1995).

The process of cooperation through this structure is characterized by informality and consensus. The absence of a formal instrument and diplomatic process has been covered by an inter-bureaucratic arrangement by virtue of which decision making takes place at a technical, rather than a political level. Decisions are not binding but, because they are generally reached on the basis of consensus and decision-making is a participatory process, the outcome tends to be agreements of a morally binding nature. A spirit of mutual expectations for activities has provided motivation to fulfil commitments. In the absence of formal agreements, there has been a concerted attempt to integrate regional commitments into

departmental responsibilities. The practical implications of this is that the various agencies active in the regime simply utilize existing agency resources to fulfil commitments. These agency commitments comprise the bulk of the resources channelled into the regime.

This approach has both its strengths and weaknesses. The assimilation of regional commitments into agency mandates has clarified the procedure for incorporating decisions into domestic actions. Cooperation is a *de facto* responsibility of each participating agency. However, because environmental policies, programs and legislation vary in accordance with local political priorities, the implementation of the Action Plan varies also from jurisdiction to jurisdiction. Often, Gulf-related activities and efforts are assigned in addition to the regular responsibilities of departmental and agency staff.

The Gulf of Maine Agreement and Action Plans, while positive developments, may be characterized as 'first steps' rather than a fully fleshed and mature regional regime for binational ecosystem management. Concrete regional environmental standards are yet to be developed or agreed to and a firm financial mechanism has not been developed. Although both financial and in-kind support has been provided by all jurisdictions and other participants, this is clearly not sufficient for longer-term program development. There are activities under the agreement that either require funding over and above what the agencies are able to commit or where agency-based funding would not be appropriate. The financial base is uncertain from year to year, and productive time must be spent on fund raising and program reorientation.

Beyond the substantial in-kind and financial resources contributed by member agencies in Canada and the U.S., the program has benefited over the years from U.S. federal grants. In 1992, resources were provided by NOAA, largely to support the Gulf-wide monitoring program. In 1994, the U.S. Congress awarded a matching grant to the Council of U.S. \$1.9 million. A similar grant of U.S. \$0.5 million was awarded in 1998 and similar levels of support are still being realized. However, these infusions of funds have been both a blessing and a minor bane to the Gulf of Maine program. The blessing, of course, is a greatly increased capacity to deliver priority programs within the initiative's mandate. On the other hand, the Working Group and Council have been spending more time on managing these resources, which has lessened their motivation to actively seek agency resources and commitments. One mechanism for addressing the financial needs of the Gulf of Maine program has been the establishment of two not-for-profit corporations, one each in Canada and the U.S. The intent is to create a mechanism to facilitate receipt of funds and support for Council projects outside the normal government channels.

The bottom line is that all parties are in general agreement that future regime development should continue to be guided by the sense of community and the shared maritime culture among the peoples and institutions surrounding the Gulf of Maine region. The Gulf of Maine program is a living, adaptable institution that will continue to evolve as experience and broader perspectives are brought to bear.

Lessons Learned and Shared

Several key lessons have been learned over the dozen or so years that the Canada-U.S. Gulf of Maine program has been in existence. They are highlighted here as lessons learned in this east coast program and offered as insights for similar initiatives in other shared ecosystems in North America.

1. Contextualize the governance arrangement to the political, social, economic and bureaucratic realities of the eco-region in question. The governance arrangement that has evolved in the Gulf of Maine works in this setting, but would have to be tailored to these realities on a case-by-case basis.
2. States and Provinces can lead in 'federal territory'. The Gulf of Maine program is somewhat unique in that it is founded in an agreement among three state and two provincial governments. While federal agencies in both Canada and the U.S. are key participants in this program, they are not formal parties to the agreement. Given that the program is operating in federal waters, is international and transboundary in nature, and most of the financial resources come from the federal governments - all key arguments for a federal leadership and/or control - the program has been effective by supporting a provincial/state lead.
3. Focus on regional needs shared by all partners. The experience in the Gulf of Maine program has demonstrated that an emphasis on regional issues that require collaboration or cooperation, is a key to success.
4. Avoid divisive or 'too-hot' issues. While the principles of integrated management call for a comprehensive approach to the key issues in an eco-region, the experience in the Gulf of Maine has clearly demonstrated that the issue of fisheries management was just too controversial for this collaborative body to tackle. The participants have agreed

that an initial or even current-day focus on this issue, would seriously compromise the high level of collaboration and cooperation that has been built, so the issue remains off the table.

5. 'Run lean' in program finances. While it may make intuitive sense to most that with more resources, more can be accomplished, the experience in the Gulf of Maine program has been that in times where significant resources have been available to the program, the participants have tended to be somewhat 'fat and lazy' and their attention to the essential details of the program was diminished. Conversely, in very lean times, most of the participants' time was spent scrounging for meager dollars and attention to the program's objectives was diverted to basic survival. Experience to date suggests that an appropriate level of resourcing lies closer to the lean, although not starving, level; this allows basic programs to continue, but keeps the participants focused on partnerships and collaboration.

References

- Chircop, A., D. VanderZwaag, and P. Mushkat, 1995, The Gulf of Maine Agreement and Action Plan: A Novel but Nascent Approach to Transboundary Marine Environmental Protection, *Marine Policy*, Vol. 19, No. 4, 317-333.
- Gulf of Maine Council, 1996, Work in Progress: Five-Year Report on the Gulf of Maine Council on the Marine Environment, 1990-1995, Augusta, Maine.
- Harding, G.C., 1992, A Review of the Major Marine Environmental Concerns Off the East Coast in the 1980s, Canadian Technical Report of Fisheries and Aquatic Sciences, Fisheries and Oceans Canada, Dartmouth.
- Thurston, H., 1994, State of the Gulf Fact Sheet: Marine Environmental Quality in the Gulf of Maine, Gulf of Maine Council on the Marine Environment, Halifax.
- VanDuesen, K. and A.C. Johnson Hayden, 1989, The Gulf of Maine: Sustaining Our Common Heritage, Gulf of Maine Council on the Marine Environment, Augusta, Maine, 63p.
- Wells, P.G. and S.J. Ralston (eds.), 1991, Health of Our Oceans: A Status Report on Canadian Marine Environmental Quality, Environment Canada, Dartmouth and Ottawa.